

YANKOV, G.B.

BAYEV, B.V.; VOROTNIKOV, P.Ye; GOKHBERG, B.M.; SIDOROV, N.I.; SHUF, A.V.;
YAN'KOV, G.B.

High-voltage electrostatic generator in compressed gas. Dokl.
(MIRA 8:?)
AH SSSR 101 no.4:637-639 Ap '55.

1. Institut fizicheskikh problem im. S.I. Vavilova Akademii nauk
SSSR. Predstavлено академиком А.П.Александровым.
(Electrostatics) (Particle accelerators)

BULGARIA

Sovia, Voenno Meditsinsko Delo, Vol 21, No 3, Jun 66. pp 3-9

counteract blocking of N-cholinoreactive systems. In connection with the treatment of yperite injuries of the skin and eyes, it is stated that good results were obtained on experimental animals and human beings by application of an ointment containing terramycin, acetylcholine, insulin, and vitamins A and B₁. Fifteen references (7 Bulgarian, 8 USSR). Manuscript received 21 Mar 66. Russian summary.

VOLKOV, V.V.; G.B.

VOROTNIKOV, P.Ye.; KOLTYPIN, Ye.A.; SIDOROV, N.I.; YAN'KOV, G.B.

Study of the D-D reaction in the 0,20 to 1,75 Mev deuteron energy
range. Atom energ. suppl. no.515-25 '57.
(Nuclear reactions) (MIRA 1182)

YAN'KOV, G.B.

PHASE I BOOK EXPLOITATION SOV/4395

Gokhberg, Boris Mikhaylovich, and Gleb Borisovich Yan'kov

Elektrostaticeskiye uskoriteli zaryazhennykh chastits
(Electrostatic Accelerators of Charged Particles) Moscow,
Atomizdat, 1960. 50 p. 6,000 copies printed.

Ed.: A. F. Alyab'yev; Tech. Ed.: N. A. Vlasova.

PURPOSE: This book is intended for scientific researchers, engineers, and students interested in methods for acceleration of charged particles and in the problems of their utilization for studies of the atomic nucleus.

COVERAGE: The book deals with accelerators which use electrostatic generators to produce high voltage. The greater part is a description of modern accelerators with belt-type electrostatic generators in compressed gas. It includes an analysis of the operation of their elements and of characteristics which determine the energy and stability of the beam of accelerated ions. No personalities are mentioned. There are 34 references: 16 Soviet, 15 English, and 3 French.

Card 1/3

33663

S/058/61/000/012/018/083

A058/A101

21.2/00

AUTHORS: Koltypin, Ye.A., Yan'kov, G.B.

TITLE: Elastic scattering of 400-Kev neutrons by Zn, Se, Zr, Nb, Mo, Cd, In and Sn

PERIODICAL: Referativnyy zhurnal. Fizika, no. 12, 1961, 105, abstract 12B52⁴
(Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomm. energii, 1959, v. 1, Tashkent, AN UzSSR, 1961, 61 - 64)TEXT: The differential cross sections of elastic scattering of neutrons (from the T(p,n)He³ reaction) by Zn, Se, Zr, Nb, Mo, Cd, In and Sn were measured. Comparison of the angular distributions shows that with increasing atomic weight of the target, the anisotropy of angular distribution at first grows weakly, but beginning with Zn it rises sharply: $\delta(0^\circ)/\delta_{min}$ equals 3.3 for Zr ($A=90$), but 4.2 for Mo ($A=96$). This variation of angular distribution is consistent with the predictions of the optical model of the nucleus.

[Abstracter's note: Complete translation]

X

Card 1/1

S/903/62/000/000/019/044
B102/B234

AUTHORS: Koltypin, Ye. A., Yan'kov, G. B.

TITLE: Elastic scattering of 400-kev neutrons from Zn, Se, Zr, Nb,
Mo, Cd, In, and Sn

SOURCE: Yadernyye reaktsii pri malykh i srednikh energiyakh; trudy
Vtoroy Vsesoyuznoy konferentsii, iyul' 1960 g. Ed. by
A. S. Davydov and others. Moscow, Izd-vo AN SSSR, 1962, 209-212

TEXT: In order to check the anisotropy in $\sigma(\theta)$ predicted by the optical model for neutrons of several kev and elements of $A \sim 100$ (which should be considerably weaker for $A \sim 80$), elastic neutron scattering was investigated as dependent on A . The neutrons used were obtained from $T(p,n)\text{He}^3$ reactions induced by 1.3-Mev protons. The scattered neutrons were recorded with proportional counters via the recoil protons. The angular distributions were measured in the interval $20 - 150^\circ$, the differential scattering cross sections were calculated from the relation $\sigma(\theta) = (N - N_{bg})d^2/N_0 R^2$, where N_{bg} are the background counts, N_0 the 0° counts without specimen, R the distance

Card 1/2

Elastic scattering of...

S/903/62/000/000/019/044
B102/B234

from the target, d the effective distance specimen to counter, A the number of nuclei in the specimen and F a geometrical factor [cm^{-2}]. The $\sigma(\theta)$ curves obtained show that from $A \sim 65$ (Zn) to $A \sim 80$ (Se) the anisotropy of the angular distribution increases slowly. For Zn $\sigma(0^\circ)/\sigma_{\min} = 2.0$ and for Se this ratio equals 2.2. Then anisotropy increases more rapidly, $\sigma(0^\circ)/\sigma_{\min} = 3.2$ for U^{238} ($A=90$) and 4.2 for Mo ($A=96$). This is in qualitative agreement with the predictions of the optical model. The results are in satisfactory agreement with those obtained by Langsdorf et al. (Phys. Rev., 107, 1077, 1957). There are 2 figures.

ASSOCIATION: Institut atomnoy energii im. I. V. Kurchatova AN SSSR
(Institute of Atomic Energy imeni I. V. Kurchatov AS USSR)

Card 2/2

L12835-51

EW(M)/EDS AFITC/ASD

ACCESSION NR: AP3003221

8/0020/63/150/006/1253/1266

AUTHOR: Koltypin, Ye. A.; Yan'kov, G. B.

53

TITLE: Force function of Ni^{62} , Se^{80} , Cd^{114} and Sn^{118} isotopes for neutrons in
the energy range 50 to 400 keV. 19 51

SOURCE: AN SSSR. Doklady*, v. 150, no. 6, 1963, 1263-1266

TOPIC TAGS: Ni^{62} , Se^{80} , Cd^{114} , Sn^{118} , pure isotope, isotope, sticking
probability

ABSTRACT: The force function (i.e. the ratio of the average reduced level widths and the average distance between levels) was determined by measuring the transparency of the target and its deviation from the exponential law. The present work essentially follows the procedures of F. Boreli et al (Phys. Rev. 109, 1958, 2079) with the difference that in this work pure isotopes rather than mixtures were used. The transparency of the T_1 isotope was first measured directly, then after neutrons were filtered by a "thick" specimen of the same isotope (T_2). T_2-T_1 gives the expected deviation. As a source of neutrons, the reaction $\text{T}(\text{p},\text{n})\text{He}^3$ was used. Protons were accelerated to 1250 keV by the

Cord 1/2

L 12835-63
ACCESSION NR: AP3003221

2

electrostatic accelerator described by B. B. Baer et al (DAN 101, 1957, 637). The filtered neutrons had energies of 50 to 400 keV. The results are summarized in a table with subsequent discussion. "In conclusion, the authors consider it a pleasant duty to express their gratitude to B. M. Gokhberg and P. E. Nemirovskiy for their interest and help." This article was presented by Academician A. P. Aleksandrov, 25 Jan 63. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 14Jan63

DATE ACQ: 24Jul63

ENCL: 00

SUB CODE: PH, EL

NO REF SOV: 002

OTHER: 007

Card 2/2

ACC NR: AP6034218

(A,N)

SOURCE CODE: UR/0120/66/000/005/0037/0039

AUTHOR: Vorotnikov, P. Ye.; Zubov, Yu. G.; Molchanov, Yu. D.; Udod, A. A.;
Yan'kov, G. B.

ORG: Institute of Atomic Energy, GKAE, Moscow (Institut atomnoy energii GKAE)

TITLE: A nanosecond-pulse ion source

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1966, 37-39

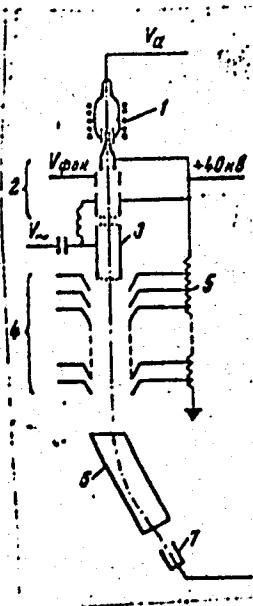
TOPIC TAGS: ion source, particle acceleration, ion accelerator, NANOSECOND
PULSE, ELECTROSTATIC GENERATOR

ABSTRACT: Test results of a pulse ion source for an electrostatic accelerator are presented. The testing apparatus was constructed on the basis of P. Ye. Vorotnikov calculations (see Fig. 1). Using a relatively low-power high-frequency source ($I \approx 60 \mu\text{A}$) and applying phase ion focusing, a very economical source of ion current pulses of approximately 2 nsec duration, a pulse current of $\approx 1.5 \text{ mA}$, and a repetition rate of approximately 4 Mc can be obtained. The ion energy spread was found to constitute 400 ev, and the ion current utilization factor was about 25%. The authors thank V. G. Brovchenko who helped in developing the measuring procedure. Orig. art. has: 5 figures and 2 formulas.

Card 1/2

UDC: 621.384.62

ACC NR: AP6034218

Fig. 1. Schematic diagram of the α -ion source

1 - High-frequency ion source; 2 - focusing system;
3 - bunching electrode; 4 - accelerating tube consisting of 16 conical electrodes; 5 - voltage divider;
6 - magnetic separator; 7 - ion collector.

SUB CODE: 20/ SUBM DATE: 14Oct65/ ORIG REF: 002/ OTH REF: 901/
Card 2/2

ALEKSANDROV, B.I.; YANKOV, G.I.

Unit for precise measurement of variable fatigue test loads.
Zav. lab. 31 no. 12:1533-1535 '65 (MIRA 19:1)

1. Minskiy institut mashinovedeniya i vtomatizatsii.

YANKOV G.V.

GINZBURG, Georgiy Aleksandrovich; YANKOV, G.V., red.; KOMAR'KOVA, L.M.,
red.izd-va; ROMANOVA, V.V., tekhn.red.

[Constructing grid lines on geographic maps according to graphic
methods] Postroenie setok meridianov i parallelei geograficheskikh
kart v osnovnom graficheskimi priemami. Moskva, Izd-vo geodez.
lit-ry, 1957. 25 p.
(Cartography)

Yankov, Iv.

~~ATEV, P.~~

RADOEV, An.
Sjalić (in caps); Given Names

Country: Bulgaria

Academic Degrees: Docent

Affiliation: not indicated

Source: Sofia, Khiriena, No 1, Jan/Feb 61, pp 19-22

Info: "A Comparative Study of the Amino-Acid Content in the Bread."

Co-authors:

YANKOV, Iv., Plovdiv

PRODANSKI, P., Plovdiv

2

DZHALDETI, A.; YANKOV, K.; TARGOV, Zh.

Some considerations on neuro-psychiatric disorders in Botkin's disease. Suvr. med. (Sofia) 15 no.11:20-25 '64.

YANKOV, K.

37373

Brigade luferenko. (lesoruby emtsov. Lestranskhoza. Arkhang. Obl. ocherk).
Sever, № 11, 1949, c. 131-42.

So: Letopis' Zhurnel'nykk Statey, Vol. 7, 1949.

Yankov, L.

KARACHELEV, Il.

Surname (in cap.) Given Name

Country: Bulgaria

Academic Degrees: not indicated

Affiliation: not indicated

Source: Sofia, Khigiena, No 1, Jan/Feb 61, pp 49-52

Date: "Epidemics of Acute Nephritis."

Co-authors:

GENEV, Iv.

APOSTOLOV, O.

(YANKOV, L.)

STOYANOV, A.

GAVAZOV, Khr.

VASILEV, Khr.

Yankov, K.

SETEV, P.

BRATOVSKI, D.
SURNAME (in code) Given Name

Country: Bulgaria

Academic Degrees: Professor

Affiliation: Member of the Board of Editors (Rezditatsionen Svet) of
Khirieta, Editing Director: Dr L. STOYANOV

Sources: Sofia, *Khirieta*, No 2, Mar/Apr 61, pp 36

Date: "Polio Prevention Through Active Immunization."

Co-authors:

STOYANOV, L.

YANKOV, K.

KARACHELEV, II.

YANKOV, K.

1. Santa, Belice, Feb. 6, 1962, November 62.
Mr. ALEXANDER, [no articulation given] pp. 1-2.
2. "Report of the Ambassador to the USSR, P. ALBERTO, on the
situation at the Cuban S.S. (Cuban People's Democratic Socialist
Society) movement in Cuba." (Report of the Cuban People's
Democratic Socialist Movement to the Cuban People's
Government, Havana; dated 27 December 1961) pp. 1-2.
3. "The Internationalization of the National Party of Marxist-Leninist
People's Democracy of Bulgaria (Bulgarian Communist Party),
Bulgaria, 1962." (Report of the Ambassador to the People's
Democratic Republic of Bulgaria, P. ALBERTO, to the Central Committee
of the Bulgarian Communist Party, 22 January 1962) pp. 1-2.
4. "American and Soviet Contributions to International Trade," P. ALBERTO
and E. GOLDBECK, [no articulation given], pp. 17-22.
5. "Annual Report of the Main Department of the State Dept. of State
Planning Commission of the USSR, Moscow, 1962." (Report of the
Ambassador to the USSR, P. ALBERTO, to the Central Committee
of the Bulgarian Communist Party, 22 January 1962) pp. 21-25.
6. "Peter in East Asian Cities - The Influence of Communism During the
Last Decade and the Next Decade: Report on East Asian Cities (January 1962)."
P. ALBERTO, to the Central Committee of the Bulgarian Communist Party, 22 January 1962.
7. "On the Internationalization of Maritime Power in Europe," A. FEDOROV,
Pol. Bureau of the Central Committee of the CPSU, Moscow, 1962.
FEDOROV, to the Central Committee of the Bulgarian Communist Party, 22 January 1962.
8. "Geological Report on Some Major Oil Fields of Yugoslavia," N.
MAGNUSSEN and R. BURTON, [no articulation given], pp. 1-2.
9. "Geological Report on Some Major Oil Fields of Yugoslavia," N.
MAGNUSSEN and R. BURTON, [no articulation given], pp. 1-2.
10. "Geological Report on Some Major Oil Fields of Yugoslavia," N.
MAGNUSSEN and R. BURTON, [no articulation given], pp. 1-2.
11. "On the Positions of Experts Abroad on the Domestic Affairs and
Foreign Policy of the People's Democratic Republic of Bulgaria (Bulgarian People's
Democrat) in Sofia," pp. 1-2.

#242
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10
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YANKOV, L.

BULGARIA/Chemical Technology. Chemical Products and I-14
Their Application--Treatment of natural gases
and petroleum. Motor fuels. Lubricants.

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 9322

Author : Yankov, L.

Inst : Not given

Title : The Regeneration of Mineral Lubricating Oils

Orig Pub: Loka promishlenost, 1955, Vol 4, No 2, 17-19
(in Bulgarian)

Abstract: No abstract

Card 1/1

YAN KOV L

Series, February, Vol. 12, No. 2, March-April 1962

1. "The Foundation of the First National Cancer Society in Bulgaria in 1954," A. BOYKA, S. MATEV, and P. STOJANOVSKI, Department of Pharmacology, Professor A. BOGDACHEV, Head of Department, Bulgarian Medical Institute, Sofia; pp 3-10.

2. "Morphine," D. NIKONOV; pp 8-9.

3. "The Application of Radiotracers Method in Pharmacy," M. PESKOV, R. OUCHAROV, and V. T. TROTSKY, of the Department of Radiopharmacology, Professor V. T. TROTSKY, Head of Department, ISML (not identified); pp 10-15.

4. "Concerning the Quantitative Specification of Caffeine and Theobromine," A. VULKA and A. KUNZEVA; pp 16-17.

5. "The Chemical and Analytical Properties of Caffeine Hydrochloride," M. KONOVO of the Pharmaceutical Institute Research Institute; pp 21-25.

6. "The Potentiometric Specification of the Reference of the Hydrazides of Phenylacetic Acid and Phenylisopropionic Acids with Calcium Nitrate," M. NIKONOV (see previous article); pp 26-27.

7. "The Production of Diprofene-Isobutylphenylether," I. ZHANGOV of the Chemical-Pharmaceutical Plant, Sofia; pp 28-29.

8. "Concerning the Development, Extraction, and Chemical Composition of the Roots of Barbiturus, C. A. M. (Bartonia) and D. B. (Acacia)," D. G. KOSTOV, as quoted in Summary, I.A. PAVLOV and D. B. KOSTOV; pp 30-35.

BULGARIA

F. YANKOV, M. PETROV and Docent Iv. KOPCHEV, Colonels, MC (Polkovnitsi
ot meditsinskata sluzhba)

"The Problem of Surgically Untransportable Patients."

Sofia, Voenno Meditsinsko Delo, Vol 18, No 2, 1963; pp 3-7.

Abstract: A general review of the problems presented by the conflicting requirement of minimizing any additional trauma to severely wounded soldiers and of giving them adequate medical aid as can only be made available in larger installations far from the front line, as based on experiences of the Soviet Armed Forces during World War II. Thirteen Soviet references.

1/1

BULGARIA

Lt Col (Podpolkovnik) L. KRUSTANOV and Col (Polkovnik) B. YANKOV, MC

"The Role of the Therapeutist in Contemporary War."

Sofia, Voenno Meditsinsko Delo, Vol 18, No 2, 1963; pp 7-10.

Abstract: An overall discussion of the patterns of war as indicated by current trends of development of destructive facilities and techniques: losses and problems will be massive , derive from nuclear biological and chemical weapons , and present totally novel problems for military medical officers. Problems of medical as opposed to surgical care are discussed on a relatively abstract level.

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S/081/63/000/002/025/088
B166/B138

AUTHORS: Ivanov, Ch., Yankov, L.

TITLE: Synthesis of 5-sulfofurfural. 5-sulfofuran derivatives with a possible tuberculostatic and bacteriostatic action

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1963, 201-202, abstract 2Zh136 (Godishnik Khim.-tekhnol. in-t, v. 7, nos. 1-2, 1960 (1961), 231-240 [Bulgarian; summaries in Russ. and Eng.])

TEXT: The interaction of furfural diacetate (I) with $C_5H_5N \cdot SO_3$ (II) yielded 5-sulfofurfural (III) and a number of its derivatives. The authors do not prove that position 5 is occupied by an SO_3H group, but take it to be so by analogy with 5-nitrofurfural, produced by nitrating, and 5-bromofurfural, produced by bromating I. 0.01 moles I and 0.03 moles II are heated for 8 hrs at 100-105°C. in a tube; the resinous mass is thoroughly mixed with $BaCO_3$ paste and heated for 45 min at ~100°C, it is filtered hot and the residue washed with ~10 ml water; the combined

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S/081/63/000/002/025/088
B166/B138

Synthesis of 5-sulfofurfural. . . .

filtrate is evaporated down to a residual volume of ~40 ml, purified with charcoal, an equal volume of saturated NaCl is added, and after ~12 hrs the Na salt of III, $C_5H_3NaO_5S$ (IIIa), is produced, yield 37%, m.p. 288-292°C. To 1 mmole IIIa in 2 ml water are added 1 mmole $4-N_2C_6H_4NNH_2$ in 20 ml alcohol and 3 drops glacial CH_3COOH , this is boiled for 15 min, 0.05 g $NaHCO_3$ is added and then it is boiled for a further 10 min; from the filtrate after ~12 hrs is separated IIIa 4-nitrophenylhydrazone, $C_{11}H_8N_3NaO_6S$, yield 70.5%, m.p. 222-226°C (decomp.; from aqueous alcohol). IIIa 2,4-dinitrophenylhydrazone, $C_{11}H_7N_4NaO_8S$, is produced in the same way, m.p. 174-177°C (decomp.; from aqueous alcohol). 1 mmole $NH_2NHCONH_2 \cdot HCl$ is dissolved in 1 ml water whilst heating, 10 ml alcohol and 0.092 g $NaHCO_3$ are added, this is boiled for 10 min, then 1 mmole IIIa in 2 ml water are added to the filtrate which is then boiled for 10 min and purified with charcoal; after this the Na salt of III semicarbazone, $C_6H_6N_3NaO_5S$, is separated out by the addition of 15 ml ether, the yield being 97.2%, m.p.

Card 2/3

Synthesis of 5-sulfofurfural. . .

8/081/63/000/002/025/088
B166/B138

228-231°C (decomp.; from aqueous alcohol). The Na salt of III thiosemi-carbazone, $C_6H_6N_3NaO_4S_2$, was produced in the same way, with a yield of 90.8%, m.p. 210-212°C (from aqueous alcohol). 1 mmole IIIa and 1 mmole hydrazide of isonicotinic acid in 3 ml water are heated until completely dissolved, 10 ml. alcohol are added and this solution is heated for 15 min at ~100°C and then purified with charcoal, after which the Na salt of 5-sulfofurylidene isonicotinoylhydrazone, $C_{11}H_{8.3}NaO_5S$, is separated by the addition of 20 ml ether; its m.p. is 301-304°C (decomp.; from aqueous alcohol). [Abstracter's note: Complete translation.] ✓

Card 3/3

BULGARIA

YANKOV, L.

Sofia, Farmatsiya, No. 1, Jan-Feb 1963, pp 27-29

"Receiving 5-Mitrofurfuriliden Semicarbazone (Furacilin)"

(1)

LAMBREV, Zh.; YANKOV, N.; ADZHAROVA, Ye.; BYCHVAROVA, T.

Antibacterial activity of certain plants used in popular
medicine. Antibiotiki 4 no.3:50-54 My-Je '59. (MIRA 12:9)

1. Kafedra biologii pri Vysshem meditsinskem institute imeni
I.P.Pavlova, Bolgariya, Plovdiv.

(PLANTS,

antibact. eff. of plants used in popular
med. (Rus))

MITOV, Anton; YANKOV, N. (Narodnaya respublica Bolgariya)

Leptospirosis in Bulgaria. Zhur.mikrobiol.epid. i immun. 27 no.4:
104-106 Ap '56. (MLRA 9:7)

(LEPTOSPIROSIS, epidemiol.
in Bulgaria)

LAMBREV, Zh., YANKOV, N., ADZHAROVA, Ye., BOCHVAROVA, T.

Antibacterial effects of certain higher fungi. Antibiotiki 3
no.1:56-58 Ja-F'58 (MIRA 11:5)

1. Kafedra biologii pri Vysshem meditsinskem institute imeni I.P.
Pavlova, Bolgariya Plovdiv.

(FUNGI,

antibiotic properties of higher forms (Rus))

(ANTIBIOTICS,

antibiotic properties of higher fungi (Rus))

MITOV, A.; YANKOV, N.; IVANOV, I., Narodnaya Respublika Bolgariya

Recent data on the problem of leptospirosis in Bulgaria. Zhur.
mikrobiol., epid. i immun. 32 no.10:65-67 0 '61. (MIRA 14:10)
(BULGARIA--LEPTOSPIROSIS)

YANKOV, N.I.; RUBINSHTEYN, S.Ya.; ALEKSANDROV, B.I.

Causes of the occurrence of cracks in the cylinder heads of
diesel engines and ways for their correction. Trakt. i
sel'khozmash. no.8:7-9 Ag '65. (MIRA 18:10)

1. Institut mashinovedeniya AN BSSR i MMZ.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4

YANKOV, P. [Lankou, P.]

Palina Faminichna. Rab. 1 sial. 36 no.3; 15 Kr '60. (MIRA 13:10)
(Women as farmers)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

YANKOV, S.

1. SUBJECT : BULGARIA - Chemical Technology, Chemical Products and Their
2. COUNTRY : Applications, Food Industry
3. AB. JOUR. : Konditsa, No 19, 1979, No. 69-543

4. AUTHORS : Stoyanova, M.I., Bonev, N., Dachevata, R.D., Gavrilova, L.

5. TITLE: Stability of Certain Varieties of Fresh and Stored
6. TREATMENT: Fruits and of Concentrates Derived from them.
ORG. PUB. : IAV, Institute of Agricultural Research, Bulka, 1978, Bu.
0, 69-20

ABSTRACT : Through experimentation performed on 4 varieties
of tomatoes it was established that in the
making of concentrates (1) from tomatoes, that
were stored for 2-4 days, the concentration of the
materials for 1 kg of 30% C increases by 0.1-0.7%.
Storage of tomatoes for 2-4 days prior to their
processing lowers considerably their quality.
Thus up to 24.5% of their sugar content and
up to 38.1% of their ascorbic acid [2] content.
Concentrates made of tomatoes that were stored for 2-4 days

S. Yankov, S.
1/2

ABSTRACT : I has lower I content and higher -id/day; Title C,
Conc'd stored for in rest. at 16-18°C their I content
is considerably reduced.

2/2

B - 127

YANKOV, S.I.

Comparative research on the amino acid composition of the kernels
of some stone fruits. Izv. vys. ucheb. zav.; pishch. tekhn.
no. 2:51-53 '61. (MIRA :4:5)

1. Vysshiy institut pishchevoy i vkusovoy promyshlennosti, g.
Plovdiv, Bolgariya. Kafedra tekhnologii konservirovaniya.
(Fruit—Chemical composition) (Amino acids)

YANKOV, S.I.

Effect of electrification of fruits on the fermenting activity of polyphenoloxidases. Izv.vys.ucheb.zav.; pishch. tekhn. no.6:55-57 '61. (MIRA 15:2)

1. Vysshiy institut pishchevoy i vkusovoy promyshlennosti, kafedra tekhnologii konservirovaniya plodov i ovoshchey g. Plovdiv, Bolgariya.
(Fruit juices)(Phenolases)

YANKOV, S. J. [IAnkov, S. I.]

Activity and localization of the polyphenoloxidase ferment in certain
fruits. Doklady BAN 14 no.5:455-458 '61.

1. Note presentee par D. Ivanov, member de l'Academie.

(Fermentation) (Fruit)

YANKOV, S. I.

1. KINETIC ENERGY OF A BULLETPROOF VEST, 1961, 10, 1-2-3-21.
 2. H. HEDBERG, INFLUENCE AND CONSEQUENCES OF CONDUCTIVE MATERIALS IN PROTECTIVE CLOTHING, 1961, 10, 77-87.
 3. K. HEDBERG, ESTIMATION OF INFLUENCE OF PROTECTIVE CLOTHING ON ELECTRICAL INSULATION, BY CHANGING INSULATING CONDITIONS, 1961, 10, 79-85.
 4. S. UEMATSU, SOME OBSERVATIONS RELATING TO THE STABILITY OF POLY(4-VINYL PYRIDINE) POLYMER, 1961, 10, 91-94.
 5. L. VILMOS, EFFECT OF THE POLYMERIC DOUBLE BOND ON POLY(VINYL PYRIDINE), 1961, 10, 95-104.
 6. S. UEMATSU, CHANGE OF THE POLYMERIC NATURE OF POLY(VINYL PYRIDINE) DURING HEATING, 1961, 10, 105-110.
 7. CHU, ZHENG, ABSORPTION OF RADIATION ENERGY IN AQUEOUS COPPER-BIOMIMIC COMPLEXES, 1961, 10, 111-115.
 8. M.S. KAMINSKY, CRYSTALLOGRAPHIC AND POLYMER STUDIES, FORMATION OF CRYSTALS IN THE POLY(METHYLACRYLIC ACID) SYSTEM, 1961, 10, 119-123.
 9. D. HODGSON, THE POLY(METHYLACRYLIC ACID) POLYMER, 1961, 10, 125-128.
 10. H.D. HODGSON, EFFECT OF TEMPERATURE AND TIME ON THE TYPE OF POLY(METHYLACRYLIC ACID) POLYMER, 1961, 10, 129-131.
 11. S. EPPINGER AND H. STEPHAN, INVESTIGATIONS OF POLY(1,3-PENTADIENE), 1961, 10, 133-136.
 12. STUDY OF RAY STABILITY FOR LINEAR POLY(1,3-PENTADIENE) CONTAINING CYCLOCHEMICAL GROUPS, 1961, 10, 137-140.
 13. J. GROSSMUTH, THE 5-PHENYL-PHENOLIC RESINS, 1961, 10, 141-150.

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APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

YANKOV, S.I.

Effect of blanching on physical properties of apples and pears.
Kons. i ov. prom. 16 no.11:41-44 N '61. (MIRA 14:11)

1. Vysshiy institut pishchevoy i vkusovoy promyshlennosti,
g. Plovdiv.

(Apple)
(Pear)

YANKOV, S.I.

Heat resistance of polyphenol oxydase in fruit juices. Kons.i
ov.prom. 17 no.2:32-36 F '62. (MIRA 15:5)

1. Vysshiy institut pishchevoy i vkusovoy promyshlennosti,
Plovdiv.

(Oxydases)
(Fruit juices)

YANKOV, S.I.

Comparative study of the amino acid composition of the linden flower (*Tilia*) and of sophora bud (Sophora japonica). Vop. pit. 21 no.2:39-41 May-Ap '68. (MIRA 15:3)

1. Iz Vysshego instituta pishchevoy i vkusovoy promyshlennosti,
Plovdiv, Bolgariya.
(AMINO ACIDS) (LINDEN) (SOPHORA)

BONEV, M.; YANKOV, S. (Plovdiv, Bulgariya)

Comparative study of the amino acid composition of some green
vegetables. Vop. pit 21 no. 4:84-85 Jl-Ag '62. (MIRA 15:12)
(VEGETABLES) (AMINO ACIDS)

YANKOV, S.I.

Thermostability of polyphenol oxidase in fruit juices. Biokhimiia
27 no.2:235-239 Mr-Ap '62. (MIRA 15:8)

1. The Higher Institute of Food and Taste Industry, Plovdiv,
Bulgaria. (FRUIT JUICES) (PHENOLASE)

YANKOV, S.I.

Comparative investigation of the amino acid composition of linden
(*Tilia*) blossoms and sophora (*Sophora japonica*) flower buds.
Dokl. AN SSSR 142 no.5:1203-1204 F '62. (MIRA 15:2)

1. Vysshiiy institut pishchevoy i vkusovoy promyshlennosti,
Plovdiv, Bulgariya. Predstavлено академиком A.I.Oparinym.
(Amino acids)
(Linden)
(Japanese pagoda tree)

YANKOV, S.I.

Heat inactivation of the oxidizing ferments in some fruits and
vegetables. Izv. vys. ucheb. zav.; pishch. tekhn. no.2:29-32 '63.
(MIRA 16:5)

1. Vysshiiy institut pishchevoy i vkusovoy promyshlennosti,
Plovdiv, Bolgariya.
(Canning and preserving)

YANKOV, V.

For highly productive work. Stroitel' 8 no.7:24-26 Jl '62.
(MIRA 15:8)

(Construction industry--Labor productivity)

YANKOV, V.A.

Superconstructive types of propositional calculus. Dokl. AN SSSR
151 no.4:796-798 Ag '63. (MIRA 16:8)

1. Matematicheskiy institut im. V.A.Steklova.AN SSSR.
(Logic, Symbolic and mathematical)

YANKOV, V.A.

Realizable formulae in propositional calculus. Dokl. AN SSSR 151
no.5:1035-1037 Ag '63. (MIRA 16:9)

1. Matematicheskiy institut im. V.A.Steklova AN SSSR.
Predstavleno akademikom P.S.Novikovym.
(Logic, Symbolic and mathematical)

YANKOV, V.A.

Relationship between deducibility in intuitionistic propositional calculus and finite implicative structures. Dokl. AN SSSR 151 no.6:1293-1294 Ag '63. (MIRA 16:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavлено akademikom P.S.Novikovym.

AUTHOR
TITLE

YANKOV, V.V.
On the Ponderomotoric Forces in a Localized Plasma in the
Electromagnetic Field of a Plane Wave. (O ponderomotornykh
silakh v lokalizovannoy plazme v elektromagnitnom pole plos-
koy volny.- Russian)

56-44367-52

PERIODICAL

Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 4,
pp 926-927 (USSR)

ABSTRACT

When plotting the field of a plane wave in a localized plasma,
ponderomotoric forces occur besides radiation pressure in the
direction of motion of the wave, which aim at deforming the
plasm. The present paper explains the character of these
forces for the special case in which the wave length is much
larger than the local dimensions of the zone of localization.
The quasineutral plasm is described phenomenologically as a
medium with the dielectricity constant ϵ , the conductivity σ ,
and the magnetic permeability $\mu = 1$. As a rough model of a
localized plasm the author investigates the sphere of an
ionized gas with uniform ionization density.
The distribution of the ponderomotoric forces over the volume
of the sphere is determined by starting with the known ex-
pression for the voltage tensor of the electromagnetic field.
If $\epsilon = 1 - \omega_0^2/\omega^2$ is put down for the plasm (ω_0 -frequency
of the plasm) and the lesses are neglected for reasons of

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56-4-36/52

On the Ponderomotoric Forces in a Localized Plasma in the Electromagnetic Field of a Plane Wave.

simplicity ($\sigma = 0$),

$$\vec{f}^V = \frac{\epsilon - 1}{8\pi} \nabla E_1^2; \vec{f}^S = \frac{1}{4\pi} \epsilon E_{1n} (\vec{E}_2 - \vec{E}_1) - \frac{1}{8\pi} (E_2^2 - E_1^2) \vec{n}.$$

is obtained. Here \vec{f}^V and \vec{f}^S denote the force operating upon the volume unity and the surface unity of the sphere respectively, E_1 and E_2 - electric field strength inside and outside the sphere, respectively; n - the exterior normal on the surface T - density of the medium,

In the case in which the radius a of the sphere is much smaller than the wave length within the vacuum and the plasma, expressions for spatial density of force within the sphere are averaged over time are given. For the density of force on the surface an analogous expression is also given. At certain values of ϵ the forces inside the sphere are directioned towards the interior. The forces on the surface of the sphere are always directioned towards the exterior. The ponderomotoric forces lead to instability of the surface layer of the plasma sphere in the field of a plane wave at $ka \ll 1$ and thus contribute towards delocalization of the plasma into all directions. Transition processes were not taken into account

CARD 2/3

56-1466/52

On the Ponderometric Forces in a Localized Plasma in the
Electromagnetic Field of a Plane Wave.

in the present paper. (No Illustrations)

ASSOCIATION: Physical Institute "P.N. LEBEDEV" of the Academy of Science of
the U.S.S.R.

PRESENTED BY: -

SUBMITTED: 6.12. 1956.

AVAILABLE: Library of Congress.

CARD 3/3

24(3), 10(4)

AUTHOR:

Yankov, V. V.

SOV/56-36-2-31/63

TITLE:

On the Behavior of a Conductive Gaseous Sphere in a Quasi-
Stationary Electromagnetic Field (O povedenii provodyashchego
gazovogo sfera v kvazistatsionarnom elektromagnitnom pole)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 2, pp 560-564 (USSR)

ABSTRACT:

A number of papers have recently been published in which the equilibria in an insulated plasma located in an electromagnetic field are dealt with (e.g. Refs 1-3). Fields with plasma-limiting configurations, which are in equilibrium, are obtained at the expense of the mutual equilibration of electrodynamic and hydrostatic forces. The behavior of this kind of equilibrium systems, and especially their stability, is of great interest (Ref 4). The problem of the stability of plasma concentrations is of great importance also for the investigation of the radiation method of accelerating concentrations of charged particles (Ref 5). In the present paper the author investigates the stability of an infinitely conductive homogeneous plasma sphere in an external quasi-steady electromagnetic field by perturbation theory methods.

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On the Behavior of a Conductive Gaseous Sphere in a
Quasi-Stationary Electromagnetic Field SOV/56-36-2-31/63

The plasma sphere is considered to be a homogeneous adiabatic system which obeys the equations of state of a perfect gas; the only external parameter is the radiation pressure acting upon the surface (gravity is neglected). The author obtains as stability criterion

$$\frac{H_o^2}{E_o^2} < \left(k_{je}/k_{jm} \right)^2 ; \quad j = 1, 2, 3.$$

and for $d \ll R_o$:

$$\frac{H_o^2}{E_o^2} > 4(l+1)l/3(l-1), \quad 2 \leq l \leq \pi R_o/2d;$$

where l is the deformation index. Analogous results can be obtained also for more complicated fields.

The author finally thanks M. S. Rabinovich for discussions. There are 6 references, 5 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: August 16, 1958
Card 2/2

21 (7), 24 (3), 10 (6)

AUTHOR: Yankov, V. V.

SOV/56-37-1-35/64

TITLE: Dynamics of a Conducting Gaseous Sphere in a Quasi-stationary Electromagnetic Field (Dinamika provodyashchego gazovogo shara v kvazistatsionarnom elektromagnitnom pole)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 1(7), pp 224 - 228 (USSR)

ABSTRACT: The author investigates a sharply limited homogeneous gaseous sphere which is situated in the quasi-stationary, spatially homogeneous, electromagnetic field $H_k = H_0 \exp(i\Omega_k^H t)$, $E_k = E_0 \exp(i\Omega_k^E t)$. $k = x, y, z$ and all Ω_k^H , Ω_k^E are assumed to be different from each other. At a strong skin effect, the alternating field does not penetrate into the interior of the plasma bunch, and its electric conductivity can be regarded as infinite. The condition for the existence of a state of equilibrium of a spherical bunch requires that the internal gas-kinetic pressure on the boundary of the plasma is in equilibrium with the electromagnetic forces:

$$(9H_0^2/32\pi)(1 - 2E_0^2/H_0^2) = p > 0. \text{ As there is no electromagnetic field}$$

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Dynamics of a Conducting Gaseous Sphere in a
Quasi-stationary Electromagnetic Field

SOV/56-37-1-35/64

within the bunch, the analysis of small deviations is based on the usual equations of hydrodynamics without considering the viscosity. For the monochromatic component then holds the potential $\tilde{\Phi}(r, \vartheta, \varphi)e^{i\omega t} - \nabla\tilde{\Phi}(r, \vartheta, \varphi)e^{i\omega t}$ of the deviations of a single particle from its position of equilibrium. In linear approximation of the perturbation theory the wave equation

$\omega^2 \tilde{\Phi} + c^2 \Delta \tilde{\Phi} = 0$ is obtained, the adiabatic sonic velocity amounting to $c^2 = \gamma p/\rho$. The particular solution

$\tilde{\Phi}_{lm}(r, \vartheta, \varphi) = \text{const. } r^{-1/2} J_{l+1/2}(\omega r/c) Y_l^m(\vartheta, \varphi)$. (ω denoting a still arbitrary frequency) must satisfy a boundary condition indicated here, which expresses the equality of the Lagrangian variations of the hydrodynamic and electrodynamic pressure on the surface of the disturbed sphere. The dispersion relation for the frequency is then derived:

$$\omega^2 = F_1(\omega) = \frac{9H_0^2}{32\pi} \frac{c^2}{\gamma p r_0} \frac{(2l+1)(l-1)}{2l+1} f_1 \frac{\sqrt{r_0}}{J_{l+1/2}(\omega r_0/c)} \left\{ \frac{d}{dr} \right\}_{r=r_0}^{1/2}$$

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SOV/56-37-1-35/64

The boundary condition $J_{1+(1/2)}(\omega r_o/\sigma) = 0$, $\sigma = 0.1$ is also added. The roots of these two transcendental equations determine the spectrum of the eigenvalues ω_1 , which belong to a given disturbance. Certain circumstances indicate the stability of the bunches with the wave lengths $\lambda_s = 2\pi r_o/1$ along the surface of the sphere, for which it holds: $f_1(E_o/H_o) > 0$. Besides, $f_1(E_o/H_o) = 1 - \frac{4}{3} \frac{1(1+1)}{1-1} \frac{E_o^2}{H_o^2}$ also holds. An instability is possible with respect to the disturbances with $f_1 < 0$. Then, the presence of the solutions $\omega^2 < 0$ leads to an increase (with progressing time) in the random deviations according to an exponential law. In order to consider the influence of the variable component of the alternating field, the author investigates, for instance, the quickly variable motion of the plasma caused by the z-component of the magnetic field. Finally, some fundamental physical results are discussed qualitatively. The author investi-

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Quasi-stationary Electromagnetic Field

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gates, above all, the mechanism of stabilization of a plasma bunch by a magnetic alternating field. The presence of one field (e.g. H_z) effects, apart from the anisotropic pressure

$\bar{p}(\vartheta) = 3H_0^2(1-Y_2^0)/32\pi$, also the instability of the disturbances with $m = 1$. The author thanks Professor M. S. Rabinovich for his advice and discussion. There are 4 references, 2 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Institute of Physics imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: February 10, 1959

Card 4/4

26.2311
24.2120

AUTHOR:

Yankov, V. V.

TITLE:

Stabilization of Localized and Flying Plasma Clusters by
Electromagnetic WavesPERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 9,
pp. 1019-1023

84438
S/057/60/030/009/002/021
B019/B054

TEXT: In the introduction, the author discusses results of investigations by V. I. Veksler (Ref. 3), M. L. Levin (Refs. 5, 6), and others concerning the behavior of plasma clusters in electromagnetic wave fields, and showing that plasma clusters can be stabilized by electromagnetic waves. In the present paper, the author investigates the stability of plasma clusters in resonators and waveguides on the basis of a generalization of results obtained by himself previously (Refs. 7, 8) on the behavior of a conducting gaseous sphere in a quasisteady electromagnetic field. To simplify the problem, the plasma sphere is assumed to have sharp outlines infinite conductivity and, moreover, to be so small as to disturb the wave field of the resonator (waveguide) only little. If the radius of the sphere is shorter than the wavelengths of the resonance band, it may also

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Stabilization of Localized and Flying Plasma
Clusters by Electromagnetic Waves

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be assumed that the cluster is in a quasistatic and quasihomogeneous field. Proceeding from (1) for H and E in the center of the plasma sphere, and from formula (3) for the ponderomotive pressure acting on the plasma sphere, the author obtains an expression for the ponderomotive pressure \bar{p} acting on the entire sphere for the case of equilibrium. \bar{p} and the gas-kinetic pressure p_{gas} are compensated in dynamic equilibrium, and the following relation holds: $\bar{p} = p_{\text{gas}} = NkT$. Next, the author analyzes the inner stability of a cluster by studying the equations of states that only slightly differ from equilibrium. He presupposes that the surface of the spherical body is described by

$$R(\theta, \varphi) = R_0 \left[1 + \sum_{l=0}^{\infty} \sum_{m=-l}^{l} \alpha_{lm} Y_l^m(\theta, \varphi) \right], \text{ and again obtains an expression}$$

for the ponderomotive pressure acting on the cluster. This formula contains a quantity f_{lm} , for whose calculation an expression is given. The positive sign of this quantity serves as a criterion for the stability of the spherical cluster. The force acting in inhomogeneous quasistatic fields on infinitely conductive spheres is calculated by

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Stabilization of Localized and Flying Plasma Clusters by Electromagnetic Waves S/057/60/030/009/002/021
B019/B054

$\vec{F} = (R_o^3/4) \text{grad}(2\vec{E}^2 - \vec{H}^2)$. Finally, the author discusses two examples.

The first illustrates the localization of a cluster in the center of a spherical resonator, and the second the stabilization of a small spherical cluster on the axis of a waveguide of circular cross section. S. I. Brazinskii and B. B. Kadomtsev (Ref. 12), and G. A. Askar'yan are mentioned. The author thanks Professor M. S. Rabinovich and M. L. Levin, Doctor of Physical and Mathematical Sciences, for valuable advice. There are 12 references: 10 Soviet, 1 US, and 1 Australian. X

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR, Moskva
(Institute of Physics imeni P. N. Lebedev of the AS USSR,
Moscow)

SUBMITTED: January 30, 1960

Card 3/3

27171

26.2331
24.6750 also 1138, 1418 2808

8/057/61/031/009/011/019
B104/B102

AUTHOR: Yankov, V. V.

TITLE: Deformation of a conducting liquid sphere under the action of a magnetic field

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 9, 1961, 1077-1082

TEXT: The author studies the deformation of an infinitely conductive incompressible liquid sphere by a magnetic field. He investigates the magnetohydrodynamic stability of a sphere to slight deformations; the internal magnetic field of a sphere of the radius R is given by

$H_r^{(i)} = H \cos\theta$, $H_\theta^{(i)} = -H \sin\theta$, the external magnetic dipole field by $H_r^{(e)} = H(\frac{R}{r})^3 \cos\theta$, $H_\theta^{(e)} = \frac{H}{2}(\frac{R}{r})^3 \sin\theta$. The disturbances are described by series of spherical harmonics. The local changes of the internal magnetic field due to the entrainment of the magnetic lines of force by the medium are described by

$$\delta H^{(i)} = \frac{eH}{R} \frac{l+m}{l} \left(\frac{r}{R}\right)^{l-2} \left\{ (l-1) Y_{l-1}^m, \frac{\partial Y_{l-1}^m}{\partial \theta}, \sin^{-1} \theta \frac{\partial Y_{l-1}^m}{\partial \varphi} \right\} \quad (4),$$

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Deformation of a conducting ...

the disturbances of the external magnetic field by

$$\left. \begin{aligned} \delta H_r^{(i)} &= \frac{iH}{R} \left[\frac{(l+m)(l-1)(l+2)}{2l(2l+1)} \left(\frac{R}{r}\right)^{l+1} Y_{l-1}^m + \right. \\ &\quad \left. + \frac{3(l-m+1)(l+2)}{2(2l+1)} \left(\frac{R}{r}\right)^{l+3} Y_{l+1}^m \right], \\ \delta H_\theta^{(i)} &= -\frac{iH}{R} \left[\frac{(l+m)(l-1)(l+2)}{2l^2(2l+1)} \left(\frac{R}{r}\right)^{l+1} \frac{\partial Y_{l-1}^m}{\partial \theta} + \right. \\ &\quad \left. + \frac{3(l-m+1)}{2(2l+1)} \left(\frac{R}{r}\right)^{l+3} \frac{\partial Y_{l+1}^m}{\partial \theta} \right], \\ \delta H_\varphi^{(i)} &= -\frac{iH}{R} \left[\frac{(l+m)(l-1)(l+2)}{2l^2(2l+1)} \left(\frac{R}{r}\right)^{l+1} \frac{\partial Y_{l-1}^m}{\partial \varphi} + \right. \\ &\quad \left. + \frac{3(l-m+1)}{2(2l+1)} \left(\frac{R}{r}\right)^{l+3} \frac{\partial Y_{l+1}^m}{\partial \varphi} \right] \sin^{-1} \theta. \end{aligned} \right\} (5). \quad \checkmark$$

The ponderomotive force acting on the surface unit of the sphere is calculated from the Maxwellian stress tensor. The change in magnetic energy of the sphere with infinitely small deformation of it is obtained

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Deformation of a conducting ...

from the integral of the dot product of the surface shift with the vector of the ponderomotive force taken over the spherical surface:

$$\delta M = - \oint (\delta \mathbf{f}) d\sigma = - \int_0^r \int_0^{2\pi} (\delta \mathbf{f}) \times$$

$$\times \left[1 + \frac{1}{r^2} \left(\frac{\partial r}{\partial \theta} \right)^2 + \frac{1}{r^2 \sin^2 \theta} \left(\frac{\partial r}{\partial \varphi} \right)^2 \right]^{1/2} r^2 \sin \theta d\theta d\varphi. \quad (9).$$

The integration of Eq. (9) is discussed in detail. From an analysis of the solutions, the author concludes that the magnetic fields mentioned above flatten the sphere to a spheroid, thus causing an increase in the axially asymmetric disturbances. Further, the author studies the stability of a liquid, infinitely conductive, incompressible sphere in the magnetic field

$$H_r^{(i)} = H_r^{(e)} = H \cos \vartheta \quad \text{and} \quad H_\vartheta^{(i)} = H_\vartheta^{(e)} = - H \sin \vartheta.$$

He again obtains an expression for the change of the magnetic energy M . An analysis of this expression shows that there are no instabilities as long as $M \geq 0$. The problem discussed here is important for the "electromagnetic

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S/057/61/031/009/011/019
B104/B102

Deformation of a conducting ...

crucible". The author thanks M. L. Levin and M. S. Rabinovich for attention paid to the work and for discussions. There are 6 references: 1 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: S. Chandrasekar and E. Fermi, *Astrophys. J.*, 118, 116, 1953; Rayleigh, *Proc. Roy. Soc.*, 29, 95, 1879; M. L. Levin et al., *On the Stability a. Focusing of Plasma Bunches Accelerated by Radiation. Proc. of the Intern. Conf. on High-energy Accelerators a. Instrumentation, CERN, 1959.*

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR Moskva
Physics Institute imeni P. N. Lebedev of the AS USSR,
Moscow)

SUBMITTED: December 10, 1960

Card 4/4

YANKOV, V.V.

Behavior of an electric arc under high pressure. Zhur. tekhn.
fiz. 31 no.11:1324-1328 N '61. (MIRA 14:11)

1. Fizicheskiy institut imeni Lebedeva, Moskva.
(Electric arc)
(Gases at high temperatures)

30094

S/057/61/031/011/009/019

B104/B108.

26.2311

AUTHOR: Yankov, V. V.

TITLE: Behavior of an electric arc of high pressure

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 11, 1961, 1324 - 1328

TEXT: By means of the mechanism of contraction of an arc discharge suggested by W. Elenbaas (Physica, 1, 211, 1934) the influence of forces caused by the energy loss due to thermal conductivity on the behavior of an arc is investigated. For the outer pressure of an idealized column

$(T = T_0, r \leq a)$ holds: $p_T \approx \frac{\kappa}{v_T} \frac{T_0}{a \ln(R/a)}$. The stability of the equilibrium diameter of the discharge is obvious. The perturbations of p_T by a slight arbitrary deformation of the gas conductor of radius $R > a$ is given by

$$\delta p_T \approx \frac{\kappa}{v_T} \frac{T_0}{a \ln \frac{R}{a}} \left[\frac{I_m(kR) K'_m(ka) - K_m(kR) I'_m(ka)}{I_m(ka) K_m(kR) - K_m(ka) I_m(kR)} ka - 1 \right] \frac{\delta r}{a}. \quad (\text{A}).$$

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Behavior of an electric arc of ...

If $kR \gg 1$, the cylindrical discharge will be stable against short-wave perturbations:

$$\delta p_T \approx \frac{\pi}{v_T} \frac{T_0}{a \ln \frac{R}{a}} ka \frac{dr}{a}, \quad ka \gg 1, \quad (\text{B}).$$

It will be stable against all perturbations if $m \gg 1$. If $kR \ll 1$, the perturbations of p_T are given by

$$\delta p_T \approx \begin{cases} \frac{\pi}{v_T} \frac{T_0}{a \ln \frac{R}{a}} \frac{(m-1) R^{2m} + (m+1) a^{2m}}{R^{2m} - a^{2m}} \frac{dr}{a}, & m > 0, \\ \frac{\pi}{v_T} \frac{T_0}{a \ln \frac{R}{a}} \frac{1 - \ln \frac{R}{a}}{\ln \frac{R}{a}} \frac{dr}{a}, & m = 0. \end{cases} \quad (\text{C}).$$

In a detailed discussion of these results the author shows that: 1) the pinch effect has only a secondary influence on the configuration of the electric high-pressure arc. 2) The dominant role in the contraction of Card 2/3

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Behavior of an electric arc of ...

S/057/61/031/011/009/019
B104/B108

an arc discharge is played by forces arising from heat transfer. 3) The behavior of an electric high-pressure arc may be explained on the basis of the kinetics of heat. The author thanks Professor N. N. Sobolev for suggesting the problem and for discussions. There are 8 non-Soviet references. The three most recent references to English-language publications read as follows: H. Alfven, E. Smars, Nature, 188, 801, 1960; L. King, Proc. of the Colloquium Spectroscopicum Intern., 6, Amsterdam, May, 1956; L. King, Nature, 174, 1008, 1954; Appl. Sci. Res., 5B, 189, 1955.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Moskva (Physics Institute imeni P. N. Lebedev, Moscow)

SUBMITTED: December 6, 1960

Card 3/3

X

45074

S/051/63/014/001/005/031
E032/E314

211.3950

AUTHOR: Yankov, V.V.

TITLE: On the energy distribution in the continuous absorption spectrum of xenon

PERIODICAL: Optika i spektroskopiya, v. 14, no. 1, 1963,
29 - 34

TEXT: The lack of agreement between existing theoretical data on the continuous spectrum of krypton and xenon with the experimental data reported by Dronov et al (Opt. i spektr., 12, 677, 1962) has led the present author to re-examine calculations of the photoelectric cross-sections for these atoms. The basic formula for the photoelectric cross-section of an arbitrary excited atom, whose optical electron is in the (n, ℓ) state, was taken from a paper by Burgess and Seaton (Rev. Mod. Phys., 30, 992, 1958). The contribution to the absorption coefficient due to lower-lying excited energy states, which contribute to the absorption by xenon in the visible part of the spectra, was computed by summing over these levels, using numerical values of the photoelectric cross-sections averaged over groups of adjacent levels with given

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On the energy distribution....

S/051/63/014/001/005/031
E052/E314

n, l. It was found that the contribution due to s levels was entirely negligible. Among p and d levels the 5d and 6p levels gave a maximum contribution, the former being twice as important as the latter. With increasing temperature the 7p and 6d levels began to become significant. Thus, at temperatures of the order of 10 000 deg, the photoelectric absorption spectra of xenon in the visible region was almost entirely determined by transitions from the 5d and 6p levels to lower-lying terms ($J = 3/2$). The present calculations yield adequate agreement with the experimental results of Dronov et al (see above). There are 6 figures and 1 table.

SUBMITTED: January 16, 1962

Card 2/2

YANKOV, V.V.

Electodynamic interaction of a group of charges during the
scattering of a radiation flux. Zhur. eksp. i teor. fiz. 45
no.5:1634-1637 N '63. (MIRA 17:1)

1. Fizicheskiy institut imeni Lebedeva AN SSSR.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4

the previous question concerning the nature of the information and sources used.

the previously discussed question concerning the nature of the information and sources used.

plane wave with the incident normal to the surface.

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"APPROVED FOR RELEASE: 09/01/2001

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Card 2/2

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

ACC NR: AP6011386 SOURCE CODE: UR/0057/66/036/003/0438/0442
56
54
B..
AUTHOR: Yankov, V.V.
ORG: none
TITLE: Coherent reaction of a transparent cluster of charges under the influence of radiation
SOURCE: Zhurnal tekhnikeskoy fiziki, v. 36, no. 3, 1966, 438-442
TOPIC TAGS: charged particle, particle motion, particle accelerator, electromagnetic wave, electromagnetic wave reflection, particle interaction
ABSTRACT: The author discusses the interaction of a cluster of charged particles with an electromagnetic wave. It is assumed that the cluster is small compared with the wavelength of the incident waves, that it is nearly transparent, and that it is quasineutral, i.e., that the Coulomb repulsions of the particles are neutralized by the presence of particles of opposite charge whose motions need not be considered. The problem is treated by a perturbation technique: first, there is calculated the current induced in the cluster by the unmodified incident wave; next, the radiation field due to these currents is calculated; and, finally, there are calculated the forces on the particles in different parts of the cluster due to the perturbed field. Two cases are discussed in detail: a longitudinal wave incident on a spherically symmetric cluster,
Card 1/2

L 25506-66

ACC NR: AP6011386

2

and a "vortical" wave (a wave in which the electric vector is in the azimuthal direction) incident on a toroidal cluster. It is shown that the longitudinal wave not only accelerates the spherical cluster but exerts a focusing action in the direction of propagation and that the vortical wave stabilizes the toroidal form of the toroidal cluster. The stabilizing action of the vortical wave on the toroidal cluster is not affected by the presence of a longitudinal magnetic field, which can therefore be employed to stabilize the large radius of the torus. The calculations are valid only in the absence of such general types of plasma instabilities as, for example, parametric resonance or nonlinear conversion of waves. The author thanks Academician V. I. Veksler for his interest in the work and K. A. Barsykov for valuable advice. Orig. art. has: 15 formulas and 3 figures.

SUB CODE: 20

SUBM DATE: 14 May 65

ORIG. REV: 009

OTH REF: 001

Card

2/2 (1)

BULGARIA/Microbiology - Antibiosis and Symbiosis. Antibiotics. F-2

Abs Jour : Ref Zhur - Biol., No 12, 1958, 52798

Author : Toshkov, A., Nedyalkov, S., Yankov, Ya., Kamburov, G..

Inst : Higher Institute of Veterinary Medicine.

Title : A Study of Sensitivity of the Causative Agent of Gangrenous Mastitis in Relation to Sulfanilamides and Antibiotics.

Orig Pub : Nauchn. tr. Vissn. veterinaromed. in-t, 1956, 4, 39-48.

Abstract : Sulfanil preparations (norsulfasol, sulfathiazole, ciba-zole, utraseptil, white streptocide, sulfanil-amide, red streptocide, ambezide, prontosil, sulfaguanidin, and sulfamesatin) administered in dilutions of 1:500 did not exert a sufficiently bacteriostatic effect in vitro on the causative agent of gangrenous mastitis. A good effect as exerted in vitro by the antibiotics penicillin,

Card 1/2

BULGARIA/Microbiology - Antibiosis and Symbiosis. Antibiotics.. F-2

Abs Jour : Ref Zhur - Biol., No 12, 1958, 52798

gramicidin C, streptomycin, auricomycin, and terramycin.
-- A.K. Kvasnikov

Card 2/2

- 32 -

Anticonvulsants
with genetic and symptomatic effect are reported.
mysoline (0.75-1.5 g. daily) are reported.
Good anticonvulsive effect was observed in
grand mal attacks; the drug is ineffective

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001962110007-4"

* Vasilev, M.

Card:

1/1

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4

YANKOV, Ye. (Sofiya)

Sum of the squares of natural series. Mat. v shkole no.6:76
N-D '59. (MIRA 13:3)
(Series)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

L 40152-66 ENT(m)/EXP(j) IJP(c) RM

ACC NR: AP6019446

(A)

SOURCE CODE: UR/0303/66/000/003/0010/0013 47

AUTHOR: Taubman, A. B.; Blyskosh, G. S.; Yanova, L. P.

ORG: none

TITLE: Mechanical and chemical modification of the surface of pigments and fillers by grafting of polymers

SOURCE: Lakokrasochnye materialy i ikh primeneniye, no. 3, 1966, 10-13

TOPIC TAGS: graft polymer, calcium carbonate, polystyrene, styrene, barium sulfate grafting, polymerization, PIGMENT, FILLER, CHEMICAL DISPERSION, MONOMER, POLYMER

ABSTRACT: A study has been made of the mechanical and chemical grafting of polystyrene to the surface of calcium carbonate, ferric oxide, and barium sulfate by dispersing them in a vibratory mill in aqueous styrene emulsions. It has been shown that the grafting effect is increased by the presence of small amounts of water in styrene; the rate of conversion of the monomer into a polymer in styrene emulsions and in anhydrous styrene is about the same. It has been established that the activating effect of water is related to its facilitating the process of dispersion, which leads to an intensified growth of the activated surface. A study of the strength properties of filled varnish films has shown that the grafting of polystyrene, while modifying the surface of the pigment, renders it hydrophobic, thus improving the quality of the films. Orig. art. has: 6 figures and 1 table. [AM]

SUB CODE: 0711 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 001
Card 1/1 UDC: 667.633.263.3

KIOSOVSKIY, B.N.; YANKOVA, M.F.; TAMBOVTSIEVA, A.V.

Causes of some endocrine diseases; adrenal and thyroid glands.
Vest. AMN SSSR 20 no.3:25-37 '65. (MIRA 18:7)

1. Institut pediatrii AMN SSSR, Moskva.

YANKOVA, M.F.

Clinical and experimental data on the influence of thyroid gland diseases in the mother on development of the fetus. Vop. okh. mat. 1 det. 6 no.10:49-54 O '61. (MIRA 14:11)

1. Iz otsteleniya razvitiya mozga i psikhoneurologicheskoy kliniki (rukoveditel' - chlen-korrespondent AMN SSSR prof. B.N.Klosovskiy) Instituta pediatrii (dir. - deystvitel'nyy chlen AMN SSSR prof. O.D.Sokolova-Ponomareva) AMN SSSR.
(THYROID GLAND—DISEASES)
(PREGNANCY, COMPLICATIONS OF) (FETUS)

YANKOVA, M.F. (Moskva)

Pathological changes in the development of a child's brain as a result of disordered thyroid gland function in pregnancy. Probl. endok.i gorm. 7 no.3:84-88 '61. (MIRA 13:9)

1. Iz otdeleliya razvitiya mozga i psikhoneurologicheskoy kliniki (rukododitel' - prof. B.N. Klosovskiy) Instituta pediatrii (dir. - prof. O.D. Sokolova-Ponomareva) AMN SSSR.
(BRAIN—ABNORMALITIES AND DEFORMITIES) (THYROID GLAND—DISEASES)
(PREGNANCY, COMPLICATIONS OF)

Yankovich, A

YUGOSLAVIA/Physical Chemistry/- Radiation Chemistry.
Photochemistry. Theory of the Photographic Process.

B-10

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24269

Author : Yankovich, A.

Inst :

Title : Action of Ultrasonics on Oxidation of Potassium Iodide
Solution.

Orig Pub : Acta veterin., 1957, 7, No 1, 81-84

Abstract : Study of the kinetics of oxidation of 5% solutions of KI
by action of continuous exposure to ultrasound of 800
kilohertz frequency and 0.5-5 watt/cm² power, and of modu-
lated exposure (about 0.5 second of exposure followed by
0.5 second interval) of equal intensity. On continuous
exposure 2-6 times more of free I₂ was liberated. The
amount of liberated I is a direct function of the absorbed
ultrasonic energy.

Card 1/1

SOKOLOV, I.I.; YANKOVSKAYA, A.I.

A survey of water mites (Acariformes, Hydracarina) in Leningrad Province and Karelia. Trudy Zool.inst. 31:389-428 '62.
(MIRA 16:1)

(Leningrad Province—Hydracarina)
(Karelia—Hydracarina)

YANKOVSKAYA, A.I.

Relict crustaceans in the coastal bottom waters of Lake Issykkul' (the northern Tien Shan). Zool. zhur. 43 no.7:975-986 '64.

(MIRA 17:12)

1. Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad.

PA 61T36

USSR/Engineering
Cargo Handling
Freezing

Feb 1948

"Facilitating the Unloading of Cargo Which Has Frozen
Together," G. P. Yankovich, Engr, 2 pp

"Elek Stants" No 2

Coal, under transportation for long periods of time at low temperatures, freezes together and makes unloading difficult. Problem can be overcome by running rail cars into a heating shed before sending them to unloading platform. Gives data for building sheds that will handle up to 200 cars per 24-hour period.

61T38

YANKOVIC, H. L.

COUNTRY : Yugoslavia
CATEGORY : I-5

PERIODICAL : RZBiol., No. 19, 1958, No. 87729

AUTHOR : Gavrilovich, D.; Yankovich, L.

INST. : Serbian Academy of Sciences

TITLE : Biological Observations of Upper Koch Caterpillars During 1950-1951

ORIG. PUB. : Zb. racova. Srpske AN, 1953, 31, 113-137

ABSTRACT : According to laboratory experiment data, at 20° and 25° humidity, hatching of caterpillars (C) from eggs lasted most often 15-20 minutes. Usually hatching started at 6-7 o'clock in the morning and occurred at a highest rate by 8-10 o'clock, after which hatching was rarely observed. Under natural conditions hatching of C started late in March to early in April and terminated by the end of April; its progress in different sites was dependent on temperature conditions. The period during which C are found in the "mirrors" is shortened with an increase of the temperature. Duration of the C stage is dependent on amount and quality of food, and also on the temperature. C which develop into males molt 5 times,
CARD: 1/2

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001962110007-4"

PERIODICAL : RZBiol., No. 19, 1958, No. 87729

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : 80% of C that develop into females molt 6 times, while 20% -- 5 times. It was ascertained that C feed mostly at night time. Pupation takes place mostly in the foliage, in crevices of the bark, in tree hollows, in dense ramifications. The first pupae of males were found in late May, those of females -- in early June.

CARD: 2/2

KHASHEGANU, Mikhail [Haseganu, Mihail], prof.; GIKA, G. [Chica, G.];
KHLAN, A. [Holan, A.]; SYMBOAN, S. [Simboan, S.]; MOKANU, K.
[Mocanu, K.]; MUNTYANU, T. [Munteanu, T.]; ALEKSANDRU, D.
[Alexandru, D.]; IOVENESCU, M. [Iovinescu, M.]; DZHAMO, N.
[Djamo, N.]; KCZHEVNIKOVA, Ye.V. [translator]; KORMANOV, Yu.F.
[translator]; LEONOV, V.M. [translator]; MOZHAROV, N.D.
[translator]; ZHIRMUSNKIY, M.M., red.; TOPORKOV, G.N., red.;
YANKOVICH, O.Yu., doktor, red.; BELEVA, M.A., tekhn. red.

[The economic geography of the Rumanian People's Republic]
Ekonomicheskaya geografija Rumynskoi Narodnoi Respubliki.
Kniga napisana kollektivom avtorov pod rukovodstvom Mi-
khaila Khasheganu. Moskva, Izd-vo inostr. lit-ry, 1961.
551 p. Translated from the Rumanian. (MIRA 15:4)

(Rumania--Economic geography)

Yovanovich, S.
Yugoslavia/Analytical Chemistry - Analysis of Inorganic Substances G-2

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 8479

Author : Yovanovich, M. S. and Yankovich, S.

Inst : Not given

Title : Separation of Bismuth from Other Metals by the Rapid Electrolysis of a Sulfate Solution. I.

Orig Pub : Glasnik khem. druzstva, 1955, Vol 20, No 2, 119-123 (in Serbian
with a German summary)

Abstract : A new electrolytic method for the separation of bismuth is proposed: metallic Bi (0.05-1 gm) is dissolved in conc. H_2SO_4 (10 ml) and the solution heated and diluted to ~ 150 ml. Solutions containing less than 0.5 gms Bi remain clear; when the Bi content exceeds 0.5 gms, a precipitate is formed. 5 ml C_2H_5OH are added, and the solution electrolyzed at 70° , using a potential of 2.0 v and a current of 0.6-1.6 amps. The electrolysis is stopped about 15 min after the current is lowered to 0.1 amp. The results from the experiments are in fairly good agreement with expectations; the deposits formed at the cathode are of completely satisfactory quality.

Card 1/1

-31-

4771046516.9 0-14

GOTSKIY, Mikhail Vladimirovich; YANKOVICH, V.H., redaktor; DIZHUR, I.M.,
redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy redaktor

[Experience in navigating through ice fields] Opyt ledovogo plavaniia.
Moskva, Izd-vo "Morskoi transport," 1957. 358 p. (MLRA 10:9)
(Navigation)

BOCHEK, Aleksandr Pavlovich; GRIGOR'YEV, Vissarion Vissarionovich;
DUBININ, Aleksandr Iosifovich; MEDVEDEV, Vasiliy Fedorovich;
PETROV, Mikhail Kliment'yevich [deceased]; YANKOVICH, Vladimir
Nikolayevich; PETIN, M.I., red.; TIKHONOVA, Ye.A., tekhn.red.

[Marine practice] Morskaia praktika. Pod obshchei red.V.N.
Iankovicha. Moskva, Izd-vo "Morskoi transport." Pt.2. 1959.
418 p.

(MIRA 13:1)

(Navigation)

USSR/Medicine - Veterinary, Dissection

Card 1/1

Author : Yankovoy, G. A., Prosector

Title : Methods of dissecting the spinal cord of domestic animals

Periodical : Veterinariya, 31, 52-53, Apr 1954

Abstract : The "approach from below" is claimed to be superior to the "approach from the top" when performing post mortem dissection of the bodies of domestic animals. The "approach from below" consists of placing the body of a dead animal in supine position; when the body of an animal is in that position the spinal ganglia and the spinal nerves, which remain connected to the spinal cord, can be extracted simultaneously. By using the "approach from below" one person can make a detailed study of the pathologico-morphologic changes in the internal area of the osseous part of the spinal column, requiring no assistance. The anatomical peculiarities of different animals must be taken into consideration when using this method of dissection. Illustrations.

Institutions : Kiev Veterinary Institute

Submitted :

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4

YANKOVY, V. (Leningradskaya oblast')

Using a mounted nozzle assembly. Pozh.delo 6 no.10:20 0 '60.
(MIRA 13:10)
(Fire sprinklers)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

YANKOVSKAYA, A.I.

Brief investigation of the hydrofauna in Irkht Bay of Sarez Lake.
Trudy probl. i tem. soveshch. no.2:213-214 '54. (MIRA 8:5)
(Sarez Lake--Fresh-water fauna)

YANKOVSKAYA, A.I.

Identification of the Hydracarina of Krasnodar Territory.
Trudy Zool.inst. 26:360-364 '59. (MIRA 13:5)
(Krasnodar Territory--Water mites)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4

YANKOVSKAYA, A.I.

Fauna of hot springs of the eastern Pamirs. Trudy Zool. inst. 35:
43-56 '65. (MIRA 19:1)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962110007-4"

YANKOVSKAYA, A.I.

Water mites of the Oka River. Trudy Zool. inst. 32:155-163 '64.
(MIRA 17:11)

YANKOVSKAYA, A. S.

25961

Vliyaniye gyemotransfueii na funtsional'noye sostoyaniye fisiologisheskoy
sistemy soyedinitel'noy tkani. Med. Zhurnal, T. XIX, vyp. 2, 1949, s. 76-84. -
Na ukr. yae. - Ryezumye na Rus. yae. -

11. Endokrinologiya

SO: Letopis' No. 34

YANKOVSKAYA, A. S.

"Age Characteristics of the Reaction of an Organism to the Transfusion of Compatible Blood." Cand Med Sci, All Union Inst of Orthopedics and Traumatology; Inst of Experimental Biology and Pathology, Kiev, 1953.
(RZhBiol, No 6, 1954)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (ll)

SO: Sum. No. 521, 2 Jun 55